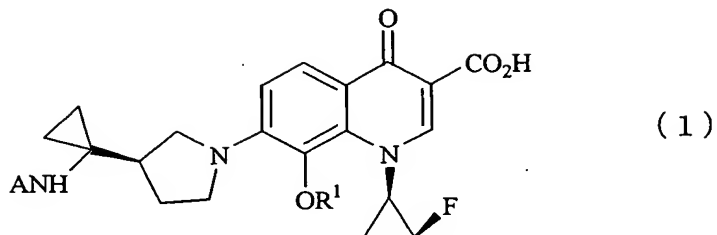
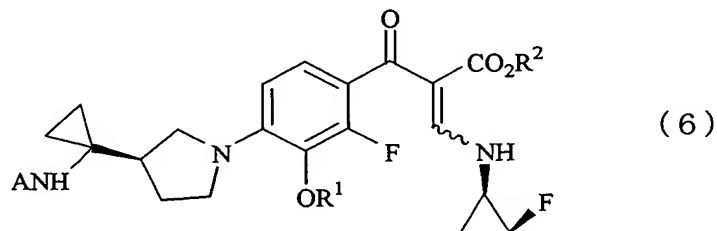


CLAIMS

1. A process for producing a compound represented by formula (1):

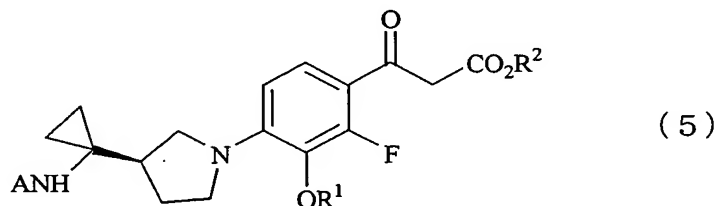


wherein R¹ represents a lower alkyl group and A represents an amino-protecting group which comprises treating a compound represented by formula (6):



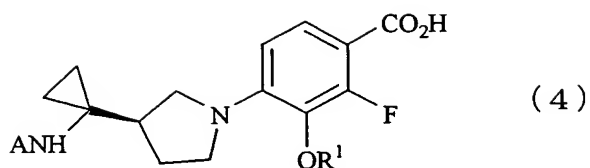
wherein R¹ and A are as defined above and R² represents a lower alkyl group with a base in a water-containing solvent.

2. The process according to claim 1, wherein the compound represented by formula (6) is prepared by reacting a compound represented by formula (5):



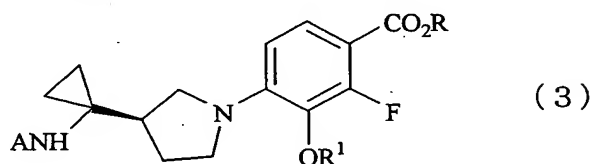
wherein R¹, R² and A are as defined above, with an ortho ester and then with (1R,2S)-2-fluorocyclopropylamine or a salt thereof.

3. The process according to claim 2, wherein the compound represented by formula (5) is prepared by converting a compound represented by formula (4):



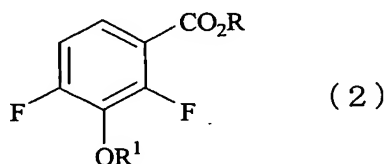
wherein R¹ and A are as defined above to an acid halide with a halogenating agent or to an acylimidazole with a carbonyldiimidazole condensing agent, and then reacting the resultant product with a magnesium salt of a lower alkyl monoester of malonic acid, or, in the presence of a base, with a lower alkyl monoester of malonic acid.

4. The process according to claim 3, wherein the compound represented by formula (4) is prepared by hydrolyzing a compound represented by formula (3):

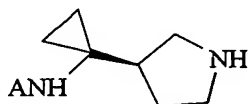


wherein R represents a lower alkyl group and R¹ and A are as defined above.

5. The process according to claim 4, wherein the compound represented by formula (3) is prepared by reacting a compound represented by formula (2):



wherein R and R¹ are as defined above with a compound represented by the following formula:



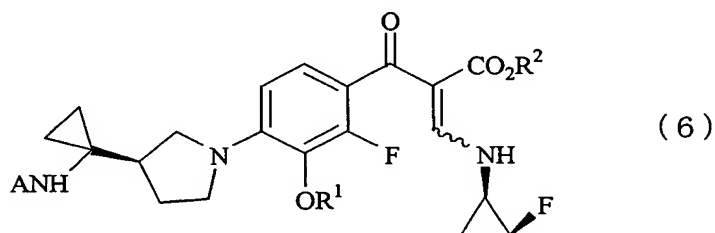
wherein A is as defined above in a solvent which dissolves the compound of formula (2).

6. The process according to claim 4, wherein the solvent is a highly polar solvent.

7. The process according to claim 6, wherein the highly polar solvent is one selected from dimethylsulfoxide, N,N-dimethylformamide and ionic liquids.

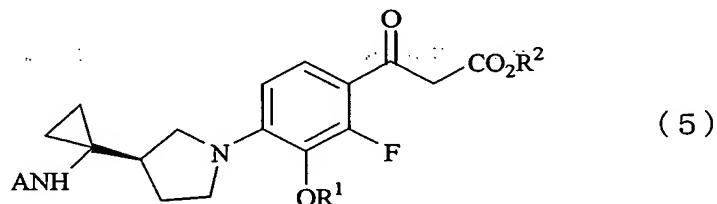
8. The process according to claim 5, wherein the solvent is dimethylsulfoxide.

9. A compound represented by formula (6):



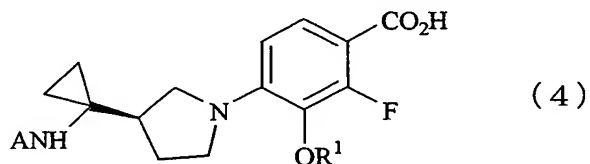
wherein R¹ and R² represent each independently a lower alkyl group and A represents an amino-protecting group.

10. A compound represented by formula (5):



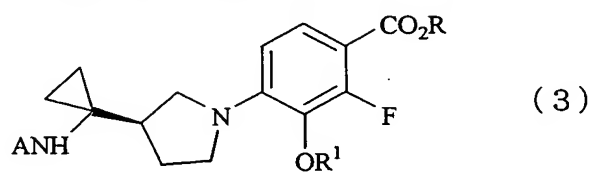
wherein R¹ and R² represent each independently a lower alkyl group and A represents an amino-protecting group.

11. A compound represented by formula (4):



wherein R¹ represents a lower alkyl group and A represents an amino-protecting group.

12. A compound represented by formula (3):



5 wherein R and R^1 represent each independently a lower alkyl group and A represents an amino-protecting group.